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SOUTH FLORIDA WATER MANAGEMENT MODEL V5.0

INPUT FILE DOCUMENTATION

"known\_flow\_route\_specs.man"

Previously known as kflpts2

This file contains the known flow specification data. These data are used to route measured (historical) discharges or simulated discharges computed in route, lake\_reg\_wca, lake\_nonreg\_wca and wcaout subroutines to appropriate locations specified in data below. The boundary inflow structures and/or other structures using measured flows are listed first in the order the structure names are input in the lecdef file. Next the structures input in gen\_nodal\_dep\_struc.dat file (for route, lake\_reg\_wca and lake\_nonreg\_wca subroutines) and caoflpts (for wcaout subroutine) file are included here in the order they are simulated. This file designates where the structure flow is going to be routed. The actual routing for structures below occurs in the knflows subroutine. Each structure contains two or more records of data, depending on the number of destination points. Anything known or measured must be in this file. (unit no. 22; read in subroutine KNFLOWS of cnldata.F)

Nomenclature:  
WCA=Water Conservation Area  
LEC=Lower East Coast  
SA=Service Area

COLS	VAR NAME	FORMAT	DESCRIPTION
NOTE:	Set of records 1. Through ??. is repeated for each structure, i.e., i=1, nflpts (number of flow points from lecdef)		
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1. STRUCTURE IDENTIFICATION AND CHARACTERISTICS-format (A6,2x,6i5)			
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1-6	fnm	a6	structure identification (max 6 characters)
7-8	blank	2x	
9-13	iroute_opt(i)	i5	flow option: 0 - special code 1 - to a grid cell, 2 - to a canal

- 3 - grid cell to grid cell
- 4 - grid cell to canal
- 5 - canal to grid cell
- 6 - canal to canal
- 7 - basin to canal
- 8 - basin to grid cell

NOTE: Options 7 and 8 are reserved for structures routing water to/from agricultural basins

14-18 no\_of\_down\_strm\_loc(i) i5 number of destination points of flow

NOTE: The following data (headwater and tailwater location) are used in determining the position along the reach from which water is discharged and the position along the reach to which the discharge is routed. This information is needed in determining head drop (or slope) of water surface along the major canals for every time step.

19-23	colpos_ku(i)	i5	column number of grid cell immediately upstream (headwater location) of structure, use -901 to indicate a null value
24-28	rowpos_ku(i)	i5	row number of grid cell immediately upstream (headwater location) of structure, use -901 to indicate a null value
29-33	colpos_kd(i)	i5	column number of grid cell immediately downstream (tailwater location) of structure, use -901 to indicate a null value
34-38	rowpos_kd(i)	i5	row number of grid cell immediately downstream (tailwater location) of structure, use -901 to indicate a null value

NOTE: Data input for the following records depend on the flow option for the structure. The number of records corresponds to number of destination points.

NOTE: The boundary inflow structures, structures listed in gen\_nodal\_dep\_struc.dat, and structures using special code ,as well as sll structures,if simulated, in caoflpts file are included in this file. the boundary inflow structures and/or other structures using measured flows are listed first in the order the structure names are input in lecdef file. next the structures input in gen\_nodal\_dep\_struc.dat file are listed in this file in the order in which they are input. lastly,the appropriate structures described earlier from the caoflpts file are included here in the order they are simulated. this file designates where the structure flow is going to be routed. the actual routing for structures below occurs in the knflows subroutine.

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## 2. CHARACTERISTICS OF FLOW DESTINATION FOR STRUCTURES WITH SPECIAL CODE (iroute\_opt(i)=0)

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-	canl_id	free	canal that water is distributed to if
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-	canl_id1	free	iroute_opt(i) = 0 canal that water is distributed to if iroute_opt(i) = 0
-	canl_id2	free	canal that water is distributed to if iroute_opt(i) = 0
-	canl_id3	free	canal that water is distributed to if iroute_opt(i) = 0

NOTE: The following record is read in only if flow routing option (iroute\_opt(i)) /= 0

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### 3. CHARACTERISTICS OF FLOW DESTINATION FOR STRUCTURES WITH OPTION 1 THROUGH 8

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kfl(ii,3)	free	column number of destination of flow if iroute_opt(i) = 1
kfl(ii,4)	free	row number of destination of flow if iroute_opt(i) = 1
canl_id	free	character identification of canal destination if iroute_opt(i) = 2
kfl(ii,3)	free	column number of flow source if iroute_opt(i) = 3
kfl(ii,4)	free	row number of flow source if iroute_opt(i) = 3
kfl(ii,5)	free	column number of flow destination if iroute_opt(i) = 3
kfl(ii,6)	free	row number of flow destination if iroute_opt(i) = 3
kfl(ii,3)	free	column number of flow source if iroute_opt(i) = 4
kfl(ii,4)	free	row number of flow source if iroute_opt(i) = 4
canl_id	free	name of destination canal if iroute_opt(i) = 4
canl_id	free	name of source canal if iroute_opt(i) = 5
kfl(ii,4)	free	column number of flow destination if iroute_opt(i) = 5
kfl(ii,5)	free	row number of flow destination if iroute_opt(i) = 5
canl_id	free	name of source canal if iroute_opt(i) = 6
canl_id2	free	name of desination canal if iroute_opt(i) = 6
kfl(ii,3)	free	hydrologic basin number assigned to basin (e.g. 7 for miami canal basin in eaa) if iroute_opt(i) = 7
canl_id	free	name of destination canal if iroute_opt(i) = 7
kfl(ii,5)	free	option for direction of flow in destination canal
kfl(ii,3)	free	hydrologic basin number assigned to basin (e.g. 7 for miami canal basin in eaa) if iroute_opt(i) = 8
kfl(ii,4)	free	column number of flow destination if iroute_opt(i) = 8
kfl(ii,5)	free	row number of flow destination if iroute_opt(i) = 8

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END OF DESCRIPTION FOR INPUT FILE "known\_flow\_route\_specs.man"

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